

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

IN THE CLAIMS:

1. (Currently Amended) A countermeasure method in an electronic component using a cryptographic algorithm that comprises multiple successive rounds of operation with a secret key, which algorithm utilizes wherein at least one of said rounds is implemented with a first manipulation means for supplying an output data item from an input data item, and the output data item is manipulated by means of critical instructions, said method including the step of utilizing and wherein at least one other round of said algorithm is implemented with other manipulation means for supplying output data, so that the output data item is unpredictable, said other manipulation means being obtained from said first manipulation means by performing an exclusive OR operation on said first manipulation means with a random value.

2. (Currently Amended) A countermeasure method according to Claim 1, wherein said algorithm comprises sixteen calculation rounds, each round using manipulation means for supplying an output data item from an input data item, the output data item being manipulated by critical instructions in the first three and the last three rounds, and wherein said method includes the steps of forming a first group comprising at least the first three rounds and another group comprising at least the last

three rounds, and ~~associating with~~ implementing the first group and ~~with~~ the last group with an execution sequence using the other manipulation means in at least some rounds.

3. (Previously Presented) A countermeasure method according to Claim 2, wherein four groups each of four successive rounds are formed, and said execution sequence is applied at least to the first group and to the last group.

4. (Previously Presented) A countermeasure method according to Claim 3, wherein said sequence is executed in each of the groups.

5. (Previously Presented) A countermeasure method according to Claim 2, wherein said execution sequence is applied to a first group formed from the first three rounds and to a last group formed by the last three rounds.

6. (Previously Presented) A countermeasure method according to claim 1, wherein each execution of the algorithm includes the steps of drawing a random value and calculating said other manipulation means.

7. (Previously Presented) A countermeasure method according to claim 1 wherein said manipulation means are tables of constants.

8. (Amended) A countermeasure method according to claim 1 wherein said manipulation means are used in combination with an additional exclusive OR operation with a value based upon the random value.

Claims 9 – 10. (Canceled)

11. (Previously Presented) The method of claim 1 wherein said random value is derived from one or both of the input and output data of said first manipulation means.

12. (Currently Amended) An electronic security component have a countermeasure against attacks on a secret key cryptography technique in which data is manipulated by critical instructions during multiple successive rounds of a cryptography algorithm, said component comprising:

a program memory having stored therein a first manipulating means that produces an output value from an input value for use during said critical instructions;

means for generating a random value, and

means for calculating at least one other manipulating means by combining said first manipulating means with from said random value, to be employed during a given execution of said cryptography technique. and

a processor that executes said cryptography algorithm using said first manipulating means during some of said multiple rounds and said other manipulating means during other rounds of said algorithm.

13. (Previously Presented) The electronic security component of claim 12, wherein said first and said other manipulating means each comprise a table of constants.

14. (Previously Presented) The electronic security component of claim 12, wherein said cryptography technique comprises a DES algorithm that is executed in multiple rounds.

15. (Previously Presented) The electronic security component of claim 12, wherein said component is a chip card.